



THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
Department of Food and Agriculture
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DEPARTMENT OF FOOD AND AGRICULTURE APPROVED IPM PROGRAM
FOR USE OF CHLOROTHALONIL ON GOLF PUTTING GREENS ONLY

1) Name of Applicator:

☐ Pesticide License Number:

☐ Property where application
was made:

☐ Primary Recharge Area

Zone II / IWPA and Municipality

- 2) **Diagnosis:** Anthracnose is not always easy to diagnose. You must obtain **at least one diagnosis** from a diagnostic laboratory for your property [e.g. UMass Turf Disease Diagnostic Lab (link name to: http://www.umassturf.org/services/turf_diagnostics/diseases.html)] and retain the diagnostic report in your records. It is sometimes possible to diagnose anthracnose with careful observation, but you should obtain a new diagnosis whenever you are unsure if anthracnose is the cause of a future turf problem.

Date of diagnosis: _____

Lab name: _____

- 3) **Preventive cultural practices:** The following preventive measures will help minimize anthracnose. Check those that you perform and provide details of **methods** and **dates** when practices were implemented.

____ aeration at least once a year . Details:

____ improve drainage in disease-prone greens. Details:

<input type="checkbox"/> improve air movement (e.g. tree pruning) in disease-prone greens. Details:
<input type="checkbox"/> skip clean-up pass when possible in stressful weather. Details:
<input type="checkbox"/> maintain sufficient nitrogen and water for healthy growth. Details:
<input type="checkbox"/> syringe greens to reduce stress and continue into the late afternoon when windy. Details:
<input type="checkbox"/> temporarily increase mowing height during stressful weather. Details:
<input type="checkbox"/> move cup more frequently and/or divert traffic in disease-prone greens. Details:
<input type="checkbox"/> maintain thatch at ½" or less. Details:
<input type="checkbox"/> other practices used. Details:

- 4) **Curative cultural practices:** During disease outbreaks, some additional practices will help minimize disease. Check those that you perform and provide details:

___ wash mowers when moving from greens with anthracnose to reduce spread of spores. Details

___ hydroject or spike compacted areas where disease is active Details:

___ avoid sand top-dressing until disease is checked. Details:

___ temporarily skip clean-up pass. Details:

___ spoon-feed quick release nitrogen fertilizer to enhance recovery. Details:

5) Fungicides: The University of Massachusetts Extension Turf Program has determined that there is “no viable alternative” to the use of chlorothalonil as part of a fungicide management program for anthracnose on golf course putting greens. Chlorothalonil is available for turfgrass use under numerous trade names. Examples include Andersons 5% Daconil, ChloroStar, Concorde SST, Daconil Ultrex, Daconil Weatherstik, Daconil Zn, Echo, Lebanon Daconil, Thalonil, and Ultrex. It is also present in several combination products such as Consyst, Lescro TwoSome, Spectro.

Dates and sites of pesticide applications	Rate	Product Name and EPA #

Note: Chlorothalonil is a contact/protectant fungicide. It is not effective when watered-in. A combination of chlorothalonil with a systemic/penetrant fungicide is most effective for foliar anthracnose. If you have basal rot/crown rot anthracnose, water-in the systemic/penetrant fungicide while it is still wet on the leaves to the crown area. Apply chlorothalonil in a separate application and allow it to dry. Preventive applications to disease-prone areas where anthracnose has been previously diagnosed can be very effective.

6) Sprayer calibration: You must calibrate your sprayer each year.

Date of calibration _____ Method used to calibrate _____

7) Notification form: You must notify the Department of Food and Agriculture Pesticide Bureau when you **first apply** chlorothalonil **each year**. Additional applications that year should be recorded in Section 5 (above). Email the notification form to groundwater.program@state.ma.us . Alternatively you can mail the Notification Form (link name to form) to:

Groundwater Protection Program,
Department of Food and Agriculture,
251 Causeway Street,
Boston, MA 02114

Date Notification
Form sent to DFA _____

This information must be maintained with your pesticide records.